

## **ABSTRACT**

The invention includes methods for precisely and accurately etching layers of wide bandgap semiconductor material. According to one aspect of the invention, the method includes providing a multi-layer laminate including at least a first and  
5 second layer of wide bandgap semiconductor material, measuring a first conductance of the first layer of semiconductor material, partially etching the first layer of semiconductor material a first amount, measuring a second conductance of the first layer of semiconductor material etched the first amount, and utilizing the first and second measured conductance to determine a time required to etch  
10 the first layer of semiconductor material a second amount.